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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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STRAUB & POKOTYLO
620 TINTON AVENUE
BLDG. B, 2ND FLOOR
TINTON FALLS, NJ 07724

EXAMINER

BAROT, BHARAT

ART UNIT PAPER NUMBER

2155

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/885,485	Applicant(s) GHOSH ET AL.	
	Examiner Bharat N. Barot	Art Unit 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 21-24 and 35-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

RESPONSE TO AMENDMENT

1. Claims 1-20 and 25-34 remain for further examination.

The old rejection maintained

2. Applicant's arguments with respect to claims 1-20 and 25-34 filed on August 22, 2005 have been fully considered but they are not deemed to be persuasive for the claims 1-20 and 25-34. The rejection is respectfully maintained as set forth in the last Office Action mailed on April 21, 2004.

The Restriction Maintained

3. The restriction is respectfully maintained as set forth in the Office Action mailed on November 08, 2004. Restriction for examination purposes as indicated in the Office Action is proper, and it would be a serious burden on the Examiner to examine all claims; therefore, the claims 21-24 and 35-40 are withdrawn from consideration.

DETAILED ACTION

Specification

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

5. The abstract of the disclosure is objected to because the abstract does not contain proper content of an abstract of the disclosure and proper language and format for an abstract of the disclosure. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-3, 15-17, 19-20, 25, and 31-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Squire et al (U.S. Patent No. 6,745,243).

Squire's patent meets all the limitations for the claims 1-3, 15-17, 19-20, 25, and 31-34 recited in the claimed invention.

8. As to claim 1, Squire et al teach a method for generating traffic information for analysis (abstract; and figures 5-6), the method comprising: accepting at least one sample (datagram) derived from addressed data (figures 2-3 and 6; column 6 lines 17-41; and column 9 lines 16-30); determining path-centric information based on the accepted at least one sample; and adjusting a traffic metric of a traffic parameter based on the determined path-centric information (figures 4 and 6; column 6 line 42 to column 7 line 8; and column 9 lines 31-57).

9. As to claims 2-3, Squire et al teach that the addressed data is a packet; and the sample includes information from the header of a packet (figures 2-4; and column 5 line 61 to column 6 line 5).

10. As to claim 15, Squire et al teach that the sample includes (parameters) a source address/port, a destination address/port, a protocol, and an interface number (figures 2-4; column 6 lines 17-62).

11. As to claims 16-17, Squire et al teach that the path-centric information determined includes an origin autonomous system, a peer autonomous system, and an autonomous system path (figure 1; and column 4 line 13 to column 5 line 61).

12. As to claim 19, Squire et al teach that the traffic metric adjusted is at least one of a byte count and a packet count (column 5 line 61 to column 6 line 5).

13. As to claim 20, Squire et al teach that the traffic parameter is selected from a particular pair of source and destination addresses, a particular pair of source and destination ports, and a particular pair of autonomous systems (figures 2-4; column 6 lines 17-62).

14. As to claims 25 and 31, they are also rejected for the same reasons set forth to rejecting claims 1 and 20 above, since claims 25 and 31 are merely an apparatus for the method of operation defined in the method claims 1 and 20.

15. As to claim 32, it is also rejected for the same reasons set forth to rejecting claims 1 and 25 above. Additionally, Squire et al disclose that a data forwarding device comprising: an addressed data forwarding facility for forwarding addressed data based on forwarding information (figures 4-5; and column 6 line 42 to column 8 line 34); and a routing facility for determining and disseminating network state information, and for generating path information based on the network state information (figures 5-6; and column 8 line 52 to column 9 line 57).

16. As to claims 33-34, Squire et al disclose that the routing facility affects an exterior gateway protocol and a border gateway protocol (column 7 lines 18-22 and 38-46).

Claim Rejections - 35 USC § 103(a)

17. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

18. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Squire et al (U.S. Patent No. 6,745,243) in view of Suzuki et al (U.S. Patent No. 6,771,637).

19. As to claim 4, Squire et al do not teach that the act of determining path-centric information based on the accepted at least one sample includes using at least a part of the at least one sample as a search key to find an item with a closest matching key in a data structure.

Suzuki et al teach the act of determining path-centric information based on the accepted at least one sample includes using at least a part of the at least one sample as a search key to find an item with a closest matching key in a data structure (table) (figures 6 and 8; column 8 lines 45-53; column 10 line 41 to column 11 line 48; and column 16 lines 9-31).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Suzuki et al as stated above with the method of Squire et al for generating traffic information for analysis because it would have increased the transmission efficiency and internal processing speed to improved the network latency when a traffic intensity increases.

20. As to claim 5, Suzuki et al teach that the data structure is a searchable data structure in a table form (figures 3-4; and column 8 lines 45-53), and a hash table, a binary search tree, and a trie are well-known in the art at the time the invention was made to use as data structure.

Allowable Subject Matter

21. Claims 6-14, 18, and 26-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

22. As to claims 6 and 26, the prior art of record does not teach or suggest or render obvious the act of/means for determining path-centric information based on the accepted at least one sample includes: using at least a part of the at least one sample as a search key to find a first item with a closest matching key in a first data structure; and using at least a part of the first item found as a search key to find a second item with a matching key in a second data structure.

23. As to claims 18 and 30, the prior art of record does not teach or suggest or render obvious the act of/means for adjusting a traffic metric of a traffic parameter based on the determined path-centric information includes: using a part of the determined path-centric information as a key to search items of traffic parameters; and if a traffic parameter with a matching key is found, incrementing the traffic metric of the traffic parameter; and if none of the traffic parameters has a matching key, creating a new item.

Response to Arguments

24. Applicant's arguments with respect to claims 1-20 and 25-34 filed on August 22, 2005 have been fully considered but they are not deemed to be persuasive for the claims 1-20 and 25-34.

25. In the remarks, the applicant argues that:

(A) Applicant's arguments with respect to objection of the title and abstract are not deemed to be persuasive and objection of the title and abstract stands.

(B) Applicant's arguments with respect to restriction of the claims 1-40 filed on December 13, 2004 have been fully considered but they are not deemed to be persuasive for restriction of the claims 1-40. Applicant's amendments with respect to the claims 21, 35, and 37 by adding the usage of the data structure does not change the scope of the invention and also using the phrase may be does make claim indefinite; therefore, the restriction is respectfully maintained as set forth in the Office Action mailed on November 08, 2004.

(C) Argument: Independent claims 1, 25, and 32 are not anticipated by the Squire patent because the Squire patent does not teach acts of determining and adjusting.

Response: Squire patent teaches the acts of determining path-centric (network session) information based on the accepted at least one sample; and adjusting a traffic metric (bandwidth/load) of a traffic parameter (load/bandwidth) based on the determined path-centric information (figures 4 and 6; column 6 line 42 to column 7 line 8; and column 9 lines 31-57).

(D) Argument: Dependent claims 16-17 are not anticipated by the Squire patent because the Squire patent does not teach the autonomous system.

Response: An Autonomous System is a collection of networks under a single administrative authority. Squire patent teaches a collection of networks under a single administrative authority (figure 1; and column 4 line 61 to column 5 line 10); therefore the arguments with respect to claims 16-17 are not deemed to be persuasive and rejection of the claims 16-17 stands.

(E) Argument: Dependent claim 19 is not anticipated by the Squire patent because the Squire patent does not teach the traffic metric adjusted is at least one of a byte count and a packet count.

Response: Squire teaches that the traffic metric adjusted is at least one of a byte count and a packet count (column 5 line 33 to column 6 line 5; figure 6; and column 9 lines 31-57).

(F) In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Squire does not teach that using at least a part of the at least one sample as a search key to find an item with a closest matching key in a data structure. Suzuki teaches that using at least a part of the at least one sample as a search key to find an item with a closest matching key in a data structure (table) (figures 6 and 8; column 8 lines 45-53; column 10 line 41 to column 11 line 48; and column 16 lines 9-31); therefore, the combination of these two references is teaching the claimed invention.

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Bharat Barot** whose Telephone Number is **(571) 272-3979**. The examiner can normally be reached on Monday-Friday from 9:30 AM to 6:00 PM. Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number **(571) 273-8300**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Saleh Najjar**, can be reached at **(571) 272-4006**.



**BHARAT BAROT
PRIMARY EXAMINER**

Patent Examiner Bharat Barot

Art Unit 2155

November 14, 2005